

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Name of product	Aquabrome / Aquabrome Tablets 539326
Name of substance	Bromochloro-5,5-dimethylimidazolidine-2,4-dione
EC No	251-171-5
CAS No	32718-18-6

1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended intended purpose(s)

Product for disinfection and oxidation of pool water

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor	BAYROL Deutschland GmbH Robert-Koch-Str. 4, D-82152 Planegg Phone +49 (0) 89 85701-0
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Advice

E-mail (competent person):
ASchwarzenboeck@bayrol.eu

1.4. Emergency telephone number

NCEC, Phone (+44)(0)1865407333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories Hazard Statements Classification procedure

Acute Tox. 4	H302
Skin Corr. 1B	H314
Aquatic Acute 1	H400

Hazard Statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



GHS05



GHS07



GHS09

Signal word

Danger

Hazard Statements

H302 Harmful if swallowed.

H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.

Precautionary Statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/eye protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/doctor.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous ingredients for labeling

Bromochloro-5,5-dimethylimidazolidine-2,4-dione

Supplemental Hazard information (EU)

Contact with acids liberates toxic gas.

Special rules for supplemental label elements for certain mixtures

Warning! Do not use together with other products. May release dangerous gases (chlorine).

2.3. Other hazards

Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

SECTION 3: Composition/ information on ingredients

3.1. Substances

CAS No 32718-18-6

EC No 251-171-5

Bromochloro-5,5-dimethylimidazolidine-2,4-dione

3.2. Mixtures

not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothing immediately and dispose it safely.

Symptoms of poisoning may not occur for hours, therefore medical supervision for at least 48 hours necessary.

Adhere to personal protective measures when giving first aid.

In case of inhalation

Remove the casualty into fresh air and keep him immobile.

Seek medical treatment immediately.

In case of skin contact

In case of contact with skin wash off immediately with plenty of water.

Consult a doctor if skin irritation persists.

In case of eye contact

Rinse immediately with plenty of water for at least 15 minutes.
Refer to medical treatment.

In case of ingestion

Do not induce vomiting.
Call for a doctor immediately.
Rinse out mouth and give plenty of water to drink.

4.2. Most important symptoms and effects, both acute and delayed

Physician's information / possible dangers

risk of strong eye injuries

4.3. Indication of any immediate medical attention and special treatment needed

Treatment (Advice to doctor)

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Large quantities of water
Foam

Unsuitable extinguishing media

ABC powder
carbon dioxide

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.
In the event of fire the following can be released:
Hydrogen chloride (HCl)
Hydrogen bromide (HBr)
Chlorine (Cl₂)

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.
Wear full protective clothing.

Additional information

Cool endangered containers with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.
Avoid dust formation.
Use personal protective clothing.
Keep away sources of ignition.
Use breathing apparatus if exposed to vapours/dust/aerosol.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Do not take up with sawdust or other combustible materials.

Take up mechanically and send for disposal.

Additional Information

Neutralize active chlorine and active bromine with suitable materials (Sulphite, Thiosulphate or hydrogen peroxide aqueous solution)

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8

Emergency telephone number: see section 1

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Take the usual precautions when handling with chemicals.

General protective measures

Avoid contact with eyes and skin

Do not inhale dust.

Hygiene measures

At work do not eat, drink and smoke.

Keep away from food and drink.

Wash hands before breaks and after work.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

Keep at distance of acids, reducing agents and organic substances (e.g. wood, paper, fat).

Avoid entering of water in shortage.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in original container.

Advice on storage compatibility

Do not store together with food.

Further information on storage conditions

Keep container tightly closed.

Keep container dry and store at cool and aired place.

Information on storage stability

Storage time: 5 years.

7.3. Specific end use(s)

Recommendation(s) for intended use

See section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Respiratory protection

In case of dust formation wear micro dust mask.

Hand protection

chemical-resistant gloves

Suitable materials (recommended: protection index 6, >480 minutes permeation time according to EN 374)

Nitrile-butadiene rubber (NBR) - 0.4 mm layer thickness

Butyl rubber (butyl) - 0.7mm layer thickness

In view of the many different types, the manufacturers' directions for use must be followed

Eye protection

Safety goggles

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

tablet

Colour

light yellow

Odour

typical, pungent

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	4,5	20 °C	1 g/l		
Boiling temperature / boiling range	not determined				
melting point	145-160 °C				
Flash point	not applicable				
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not determined				
Self ignition temperature	not determined				
Lower explosion limit	No information available.				

	Value	Temperature	at	Method	Remark
Upper explosion limit	No information available.				
Vapour pressure	not determined				
Relative density	1,9 g/cm ³				
Vapour density	not determined				
Solubility in water	1500 mg/l	25 °C			
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity	not determined				

Oxidising properties

No oxidiser ("GHS-Manual" 2. Kap. 2.14).

Explosive properties

No information available.

9.2. Other information

No information available.

SECTION 10: Stability and reactivity
10.1. Reactivity

Thermal decomposition can lead to the escape of irritating gases and vapours.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gases.

10.4. Conditions to avoid

Reactions with combustible substances.

Reactions with acids.

10.5. Incompatible materials
Substances to avoid

Reactions with acids, alkalis and oxidising agents.

As oxidising agent, attacks organic substances such as wood, paper, fats.

10.6. Hazardous decomposition products

Hydrogen chloride (HCl)

Chlorine

Bromine

Hydrogen bromide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	578 mg/kg	rat		
LD50 acute dermal	> 2000 mg/kg	rabbit		
Skin irritation	corrosive			
Eye irritation	corrosive			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity	No information available.			
Reproduction-Toxicity	No information available.			
Carcinogenicity	No information available.			

Experiences made from practice

Dust or formation of smoke irritates mucous membranes of respiratory tract.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 0,87 mg/l (96 h)	rainbow trout		
Daphnia	EC50 0,46 mg/l (48 h)	Daphnia magna		

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Biological degradability				readily degradable

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects
General regulation

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Waste code No.

16 05 09

Name of waste

discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

Recommendations for the product

Remove in accordance with local official regulations.

Dispose of as hazardous waste.

The product should not be allowed to enter drains, water courses or the soil.

Recommendations for packaging

Untampered packaging may be taken for recycling.

Recommended cleansing agent

Water

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	3085	3085	3085
14.2. UN proper shipping name	OXIDIZING SOLID, CORROSIVE, N.O.S. (Bromochloro-5,5- dimethylimidazolidine-2,4- dione)	OXIDIZING SOLID, CORROSIVE, N.O.S. (Bromochloro-5,5- dimethylimidazolidine-2,4- dione)	Oxidizing solid, corrosive, n.o. s. (Bromochloro-5,5- dimethylimidazolidine-2,4- dione)
14.3. Transport hazard class(es)	5.1 (8)	5.1 (8)	5.1 (8)
14.4. Packing group	II	II	II
14.5. Environmental hazards	Yes	Yes	Yes

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available.

Land and inland navigation transport ADR/RID

Hazard label(s) 5.1+8

tunnel restriction code E

Classification code OC2

Marine transport IMDG

MARINE POLLUTANT

! SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture **Authorizations**

! Other regulations (EU)

Regulation (EU) 1272/2008 (CLP), Regulation (EU) 1907/2006 (REACH), DECISION 2000/532/EG (list of wastes)
Regulation (EU) 528/2012 (BPR)

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

Further information

Refer to product information paper.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 12.3

Sources of key data used

Results of own researches and examinations

Literature informations

Toxicity studies, NIOSH-Tox-Data

National legislation and regulation